

REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 25, 26 and 28-40 are in the case.

I. THE INTERVIEW

At the outset, the undersigned wishes to thank the Examiner (Mr. Walker) for kindly agreeing to conduct an interview in this case. The interview was held on February 18, 2010, and the courtesies extended by the Examiner were most appreciated. The substance of the interview will be clear from the Interview Summary and the comments presented below.

II. THE OBVIOUSNESS REJECTIONS

Claims 25, 26 and 28-30 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over US 5,824,434 (Kawakami) in view of US 4,297,249 (Przybyla) and US 4,338,200 (Zeijlstra). Claims 31-35 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Kawakami in view of Przybyla and Zeijlstra and further in view of US 4,146,685 (Tucholski) and US 4,307,027 (Borzelli). Claims 36-40 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Kawakami in view of Przybyla, Zeijlstra, Tucholski and Borzelli and further in view of US 5,688,616 (Yamawaki). Claims 25, 26 and 28-35 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over US 4,492,744 (Brown) in view of Przybyla, Zeijlstra, Tucholski and Borzelli. Claims 36-40 are rejected under 35 U.S.C. §103(a) as allegedly

unpatentable over Brown in view of Przybyla, Zeijlstra, Tucholski and Borzelli and further in view of US 5,688,616 (Yamawaki). The rejections are respectfully traversed.

As amended, claim 25 claims a method of preparing a zinc anode composition as an intimate mixture of an insoluble salt of a C6-C30 fatty acid and zinc hydroxide ([00093, lines 3-4]). The method comprises the steps of (i) preparing a suspension of a first precipitate of zinc hydroxide in a solution of an alkali salt of a C6-C30 fatty acid and then adding a solution of a salt of an acid to that suspension, to provide the zinc anode composition as the intimate mixture of the insoluble salt of a C6-C30 fatty acid and the zinc hydroxide as a second precipitate.

As noted during the interview, the order in which the steps defining the claimed method are performed is essential to obtaining the zinc anode composition as an intimate mixture of zinc hydroxide and an insoluble salt of a fatty acid. Thus, it is critical in forming the intimate mixture to first form a suspension of a first precipitate of zinc hydroxide in a solution of an alkali salt of a C6-C30 fatty acid, and then to add a solution of a salt of an acid to the suspension of the first zinc hydroxide precipitate to provide, as the intimate mixture of the insoluble salt of a C6-C30 fatty acid and zinc hydroxide, the zinc anode composition as a second precipitate. This claimed methodology is not suggested by the combined disclosures of the cited references.

The Action states (page 3, 4th paragraph onwards):

Kawakami is silent to first precipitating the zinc hydroxide that is taught as being used to make the anode. The method of precipitating zinc hydroxide is well-known in the art and it would be obvious to one of ordinary skill in the art to understand and be able to perform the chemistry to precipitate zinc hydroxide rather than purchase the product.

Zeijlstra teaches a method of precipitating heavy metals from aqueous liquids. A zinc hydroxide precipitate is acquired by mixing together zinc stearate and sodium hydroxide in an aqueous medium (Abstract, 1:35-40, 2:50-53, 3:60-68, 4:15-25).

Zeijlstra teaches precipitating zinc hydroxide using the same method and same components as exemplified by applicant in the instant application. Precipitating zinc hydroxide is a well-known method of obtaining the material and using zinc hydroxide to make an anode is also well-known. Therefore, it would be obvious to one of ordinary skill in the art to use the well-known method of obtaining zinc hydroxide to produce the composition that is going to be used in the well-known anode active material.

Combining prior art elements according to known methods to yield predictable results and using known techniques to improve similar devices in the same way are considered obvious to one of ordinary skill in the art (KSR, MPEP 2141 (III)).

As explained during the interview, one of ordinary skill would not have been motivated based on the cited references to Kawakami, Przybyla and Zeijlstra to perform the presently claimed step methodology to obtain a zinc anode composition with the advantageous properties disclosed in the specification. Thus, as stated at paragraph [0082] of the specification as published (US 2005/0026038):

The active composition may be formed as an intimate mixture, by precipitation of a zinc salt of a fatty acid and zinc hydroxide by rapid mixing of an alkaline mixture of the fatty acid, and the zinc salt. Species such as the salt zinc monostearate monohydroxide may also form in this precipitation and further enhance the battery performance.

Agreement was generally reached at the interview that the cited art fails to suggest the second step of the claimed method of adding a solution of a salt to the zinc hydroxide suspension to give an intimate mixture of zinc hydroxide and an insoluble salt of a C₆-C₃₀ fatty acid as a second precipitate. The Examiner noted that a further updating search would be required.

Based on the above, it is clear that claims 25, 26 and 28-30 are not rendered unpatentable by Kawakami taken alone or in combination with Przybyla and/or Zeijlstra. Withdrawal of the obviousness rejection of claims 25, 26 and 28-30 based on those three references is respectfully requested.

Referring to the obviousness rejections of claims 31-40, those claims are dependent, either directly or indirectly, on claim 25 and thereby incorporate the features of claim 25 which are not rendered unpatentable by Kawakami, Przybyla and Zeijlstra for the reasons discussed above. The secondary art to Borzelli, Cunder and Yamawaki does not the deficiencies of the primary references. Borzelli and Cunder disclose a continuous process for preparing dry metallic salts of higher fatty acids and Yamawaki is relied upon for an alleged disclosure that calcium nitrate and zinc sulfate are substitute salts for use in a battery. The combination of Kawakami, Przybyla, Zeijlstra, Tucholski, Borzelli and/or Yamawaki clearly does not give rise to a *prima facie* case of obviousness of claims 31-40. Withdrawal of the obviousness rejections of claims 31-40 is respectfully requested.

Referring to the obviousness rejection of claims 25, 26 and 28-35 as allegedly unpatentable over Brown in view of Przybyla, Zeijlstra, Tucholski and Borzelli, and the obviousness rejection of claims 36-40 as allegedly unpatentable over Brown in view of Przybyla, Zeijlstra, Tucholski, Borzelli and Yamawaki, Brown discloses a secondary zinc electrode having an electrically conductive support onto each major surface of which is pressed an active zinc material. As with the first obviousness rejection over Kawakami in view of Przybyla and Zeijlstra, there is no suggestion in the combination of Brown, Przybyla and Zeijlstra of the presently claimed methodology in which an intimate

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mixture of zinc hydroxide and an insoluble salt of a C₆-C₃₀ fatty acid is precipitated. The secondary art to Tucholski, Borzelli and Yamawaki does not cure the deficiencies of Brown, Przybyla and Zeijlstra as discussed above. Withdrawal of all of the obviousness rejections is accordingly respectfully requested.

Favorable action is awaited.

Respectfully submitted,

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